

REMARKS

At the outset, the Examiner is thanked for her thorough review and consideration of the application.

Claims 1-28 were examined. Applicants add new dependent claims 28-32 to provide further coverage of Applicants' invention in the claims.

The Examiner objects to Figure 6 for including a reference number "16" not mentioned in the description. Applicants submit a sheet of substitute formal drawings for Figures 4-6 with the corrected reference numeral. Applicants respectfully request the Examiner to approve these drawings and withdraw the objection.

The Examiner objects to a typographical error in Claim 10. Applicants amend Claim 10 to correct this typographical error. However, this amendment is not made for purposes of patentability and therefore does not give rise to any estoppel. Applicants have also amended claim 8 to more clearly recite a feature of the invention.

In the Office Section, claims 1-8, 11-20 and 23 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,953,094 to Matsuoka, et al. (hereinafter "Matsuoka"). Claims 24-28 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsuoka in view of U.S. Patent 6,486,930B1 to Oh-kyong Kwon. Claims 9-10 and 21-22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsuoka and further in view of U.S. Patent 6,552,764B2 to Fujioka et al. (hereinafter "Fujioka") and Oh-kyong Kwon.

The rejection of claims 1-28 is respectfully traversed and reconsideration is requested. Independent claims 1, 11, 14, and 24 are allowable over the cited references in that these claims recite a combination of elements not taught or disclosed in the references

In particular, the rejection of independent claim 1 is respectfully traversed and reconsideration is requested. Claim 1 is allowable over the cited references in that this claim recites a combination of elements including, for example, "a first substrate having a groove around a display area; [and] a second substrate having a ridge that extends into the groove", and "a second substrate having a ridge that extends into the groove."

The Examiner alleges that Matsuoka discloses the feature of the claimed invention. Applicants respectfully disagree. The Examiner relies solely on Matsuoka to disclose the “groove” and “ridge” of the claims. However, Matsuoka clearly does not teach, disclose, or suggest either of these features. For example, reference numeral 20, cited by the Examiner as disclosing the “groove” of the claims, is not, in fact, a groove at all. Rather, reference numeral 20 refers to a contact pad, which is not a groove (Matsuoka, column 4, lines 15-31). In addition, element 20 is not “around a display area” as required by the claims. Because 20 is a contact pad, it is not around anything (Matsuoka, Fig. 7A and column 4, lines 29-31).

Furthermore, element 21 in Figs 7A-C does not disclose the “ridge” of the claim, contrary to the assertion of the Examiner. Fig. 7B clearly shows that element 21 is not a ridge. Element 21 is a conductive material that connects contact pad 20 to electrode 17 (Matsuoka, column 4, lines 15-25). Matsuoka describes “the first contact pad 20 is electrically connected to the opposite electrode 17 via the conductive material 21” (Matsouka, column 4, lines 21-23). Element 21 does not refer to a ridge it describes a conductor.

Because Matsuoka does not disclose or suggest these features of the claim, and because the Examiner, by relying solely on Matsuoka to show the “groove” and “ridge” of the claim, implicitly acknowledges that Fujioka and Oh-kyong Kwon do not disclose them, independent claim 1 is allowable over the prior art at least for these reasons.

Furthermore, claim 7 recites “the ridge is formed in a patterned material” and claim 8 recites “the patterned material is the same material as that of a photoresist”. But Matsuoka clearly describes that “the conductive material 21 is preferably made of resin mixed with conductive material” (Matsuoka, column 2, lines 21-22) but this is not a material that is used in photoresists.

Accordingly, Applicant respectfully submits that claim 1, and claims 2-10, which depend from claim 1, are allowable over the cited references. Claims 2-10 and 29 are allowable at least by virtue of their dependence on claim 1. Oh-kyong Kwon does not teach, disclose or suggest all of the features of the invention as claimed in claim 1, nor does the Examiner allege that it does. Fujioka also does not teach, disclose or suggest this feature.

Accordingly, Applicant respectfully submits that claim 1, and claims 2-10, which depend from claim 1, are allowable over the cited references.

The rejection of independent claim 11 is respectfully traversed and reconsideration is requested. Claim 11 is allowable over the cited references in that this claim recites a combination of elements including, for example, “a first patterned material on said first substrate, said first pattern material having a groove around said display predetermined area; a second substrate adjacent said first substrate; a second patterned material on said second substrate, said second patterned material having a ridge that extends into said groove”.

None of the cited references, including Matsuoka, Fujioka, and Oh-kyong Kwon, singly or in combination, teaches or suggests at least this feature of the claimed invention. The structure of claim 11 of the present invention is different from the Matsuoka structure in that the present invention relates to a structure for capturing liquid crystal runoff during the manufacturing process, whereas Matsuoka relates to preventing corrosion of wiring around a substrate.

As discussed above, Matsuoka does not disclose or suggest the “groove” or “ridge” of the claim. In addition, the Examiner, by relying solely on Matsuoka to show the “groove” and “ridge” of the claim, implicitly acknowledges that Fujioka and Oh-kyong Kwon do not disclose them. Therefore, independent claim 11 is allowable of the cited references.

Accordingly, Applicant respectfully submits that claim 11, and claims 12-13 which depend from claim 11, are allowable over the cited references

The rejection of independent claim 14 is respectfully traversed and reconsideration is requested. Claim 14 is allowable over the cited references in that this claim recites a combination of elements including, for example, “(a) forming a first substrate with a groove around a display region; [and] (b) forming a second substrate with a ridge that can fit into the groove”.

None of the cited references, including Matsuoka, Fujioka, and Oh-kyong Kwon, singly or in combination, teaches or suggests at least this feature of the claimed invention. The

structure of claim 14 of the present invention is different from the Matsuoka structure in that the present invention relates to a structure for capturing liquid crystal runoff during the manufacturing process, whereas Matsuoka relates to preventing corrosion of wiring around a substrate.

As discussed above, Matsuoka does not disclose or suggest the “groove” or “ridge” of the claim. In addition, the Examiner, by relying solely on Matsuoka to show the “groove” and “ridge” of the claim, implicitly acknowledges that Fujioka and Oh-kyong Kwon do not disclose them. Therefore, independent claim 14 is allowable of the cited references.

Accordingly, Applicant respectfully submits that claim 14, and claims 15-23 which depend from claim 14, are allowable over the cited references.

The rejection of independent claim 24 is respectfully traversed and reconsideration is requested. Claim 24 is allowable over the cited references in that this claim recites a combination of elements including, for example, “(b) forming a first patterned material on the first substrate, wherein the first patterned material includes a groove around the array area; (c) forming color filters on a second substrate; [and] (d) forming a second patterned material on the second substrate, wherein the second patterned material includes a ridge dimensioned to align with the groove”.

None of the cited references, including Matsuoka, Fujioka, and Oh-kyong Kwon, singly or in combination, teaches or suggests at least this feature of the claimed invention. The structure of claim 24 of the present invention is different from the Matsuoka structure in that the present invention relates to a structure for capturing liquid crystal runoff during the manufacturing process, whereas Matsuoka relates to preventing corrosion of wiring around a substrate.

As discussed above, Matsuoka does not disclose or suggest the “groove” or “ridge” of the claim. In addition, the Examiner, by relying solely on Matsuoka to show the “groove” and “ridge” of the claim, implicitly acknowledges that Fujioka and Oh-kyong Kwon do not disclose them. Therefore, independent claim 24 is allowable of the cited references.

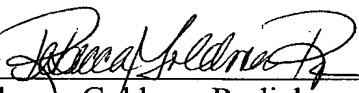
Accordingly, Applicant respectfully submits that claim 24, and claims 25-28 which depend from claim 24, are allowable over the cited references.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue. If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. § 1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. A duplicate copy of this sheet is enclosed.

Dated: December 23, 2003

Respectfully submitted,

By 
Rebecca Goldman Rudich
Registration No.: 41,786
MCKENNA LONG & ALDRIDGE LLP
1900 K Street, N.W.
Washington, DC 20006
(202) 496-7500
Attorney for Applicant

AMENDMENTS TO THE DRAWINGS

A substitute sheet of formal drawings for Figure 6 is included. The reference number '16' has been corrected to '2'.

FIG. 4

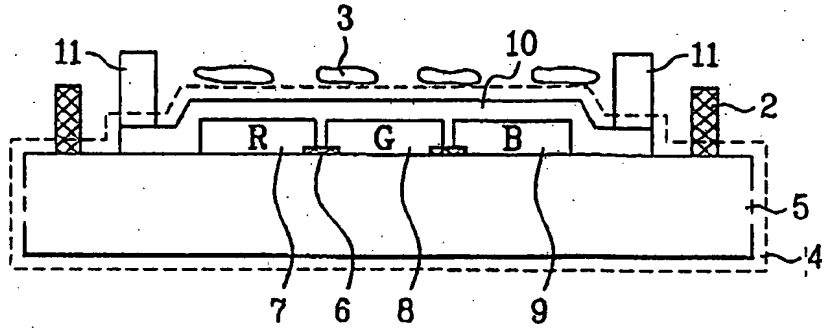


FIG. 5

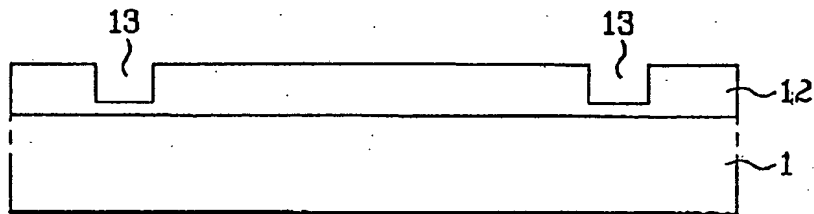


FIG. 6

